WHAT IS CLAIMED IS:

1. A communication apparatus in which a communication channel and a control channel are exclusively assigned to a radio communication resource to be used, said apparatus comprising:

means for executing data transmission/reception using the communication channel;

means for executing a control procedure required for establishment of a radio link using the control channel;

means for monitoring a traffic of the communication channel; and

means for dynamically controlling an execution timing or execution time interval of the control procedure on the basis of the traffic detected by said monitoring means.

2. The apparatus according to claim 1, wherein said control procedure includes a procedure of transmitting a terminal search message for searching for a terminal in a communication zone and acquiring information necessary for connection, and

said control means dynamically controls a transmission timing or transmission time interval of the terminal search message on the basis of the traffic detected by said monitoring means.

3. The apparatus according to claim 2, wherein said control means inhibits periodical transmission of

the terminal search message if the traffic detected by said monitoring means exceeds a predetermined value, and permits transmission of the terminal search message only when establishment of a radio link is requested by a user application.

4. The apparatus according to claim 1, wherein

said control procedure includes a terminal search wait procedure for detecting a terminal search message transmitted from a remote terminal to search for a terminal and responding the message, and

said control means dynamically controls execution time interval of the terminal search wait procedure on the basis of the traffic detected by said monitoring means.

5. The apparatus according to claim 1, wherein

said control procedure includes a connection establishment request wait procedure for detecting a connection establishment request message transmitted from a remote terminal, and

said control means dynamically controls execution time interval of the connection establishment request wait procedure on the basis of the traffic detected by said monitoring means.

6. The apparatus according to claim 1, wherein

said control procedure executes one of a terminal search mode, a terminal search wait mode, and a connection establishment request wait mode, and

said control means dynamically controls an execution timing or execution time interval of at least one of the terminal search mode, the terminal search wait mode, and the connection establishment request wait mode on the basis of the traffic detected by said monitoring means.

7. A communication apparatus in which a communication channel and a control channel are exclusively assigned to a radio communication resource to be used, said apparatus comprising:

means for executing data transmission/reception using the communication channel;

means for executing a control procedure required for establishment of a radio link using the control channel;

user interface means for setting preferentiality related to one of the data transmission/reception and the control procedure in accordance with a user operation; and

means for controlling an execution timing or execution time interval of the control procedure on the basis of a setting result of said user interface means.

8. The apparatus according to claim 7, wherein

said user interface means sets one of a first mode of preferentially executing the data transmission/ reception and a second mode of preferentially executing the control procedure, and

said control means controls the execution timing or execution time interval of the control procedure in accordance with a mode set by said user interface means.

9. A communication apparatus capable of being driven by a battery and simultaneously connecting to a plurality of remote terminals, said apparatus comprising:

means for periodically executing transmission processing of a terminal search message for searching for a remote terminal or terminal search wait processing for detecting the terminal search message and responding thereto;

means for detecting a residual capacity of the battery; and

means for dynamically controlling an execution timing or executing time interval of the transmission processing of the terminal search message or the terminal search wait processing on the basis of a detection result of said detection means.

10. The apparatus according to claim 9, further comprising:

means for determining whether a current operating power supply is the battery or an external power supply; and

means for dynamically controlling the execution timing or execution time interval of the transmission

processing of the terminal search message or the terminal search wait processing on the basis of a determination result of said determining means.

11. A control method for a communication apparatus in which a communication channel and a control channel are exclusively assigned to a radio communication resource to be used, said method comprising the steps of:

executing data transmission/reception using the communication channel and executing a control procedure required for establishment of a radio link using the control channel;

monitoring a traffic of the communication channel; and

dynamically controlling an execution timing or execution time interval of the control procedure on the basis of the traffic detected in said monitoring step.

12. The method according to claim 11, wherein

said control procedure executes one of a terminal search mode, a terminal search wait mode, and a connection establishment request wait mode, and

said controlling step comprises dynamically controlling an execution timing or execution time interval of at least one of the terminal search mode, the terminal search wait mode, and the connection establishment request wait mode on the basis of the traffic detected in said monitoring step.

13. A control method for a communication apparatus in which a communication channel and a control channel are exclusively assigned to a radio communication resource to be used, said method comprising the steps of:

executing data transmission/reception using the communication channel and executing a control procedure required for establishment of a radio link using the control channel;

setting preferentiality related to one of the data transmission/reception and the control procedure in accordance with a user operation; and

controlling an execution timing or execution time interval of the control procedure on the basis of a setting result in said setting step.

14. The method according to claim 13, further comprising the steps of:

setting one of a first mode of preferentially executing the data transmission/reception and a second mode of preferentially executing the control procedure; and

controlling the execution timing or execution time interval of the control procedure in accordance with a mode set in said setting step.

15. A control method for a communication apparatus capable of being driven by a battery and simultaneously connecting to a plurality of remote terminals, said

method comprising the steps of:

detecting a residual capacity of the battery; and

dynamically controlling an execution timing or execution time interval of transmission processing of a terminal search message for searching for a remote terminal or terminal search wait processing for detecting the terminal search message and responding to the message on the basis of a detection result in said detecting step.

16. The method according to claim 15, further comprising the steps of:

determining whether a current operating power supply is the battery or an external power supply; and

dynamically controlling the execution timing or execution time interval of the transmission processing of the terminal search message or the terminal search wait processing on the basis of a determination result in said determining step.